

CLAIMS:

1. Optical record carrier comprising a track for carrying data encoded in optical marks, a parameter of the track having a periodic variation for generating a varying signal when scanning the track, which track comprises reference elements interrupting the periodic variation, characterized in that the phase of the periodic variation after the reference elements
5 is indicative of a property of the record carrier for controlling the scanning of the record carrier in dependence of said property.
2. Optical record carrier as claimed in claim 1, characterized in that the track is scannable by a scanning beam via an entry side of the record carrier and comprises a groove
10 relative to a surrounding surface, wherein said phase is indicative of whether or not the bottom of the groove is closer to the entry side than the surrounding surface.
3. Optical record carrier as claimed in claim 1 or 2, wherein the reference elements comprise a phase jump of the periodic variation, header information, a
15 synchronization mark or a mirror mark.
4. Optical record carrier as claimed in claim 1 or 2, wherein the track also comprises lands constituted by said surface between adjacent grooves.
- 20 5. Optical record carrier as claimed in claim 1 or 2, wherein the parameter of the track is the radial position or width of the track.
6. Optical record carrier as claimed in claim 1 or 2, wherein the record carrier has at least two layers of tracks, the property indicated by said phase being different between said
25 layers.
7. Optical record carrier as claimed in claim 1 or 2, wherein the record carrier comprises recorded data.

8. Device for scanning an optical record carrier comprising a track for carrying data encoded in optical marks, a parameter of the track having a periodic variation, which track comprises reference elements interrupting the periodic variation, which device comprises a head and control means for scanning the track, characterized in that the device comprises
5 phase detection means for detecting the phase of the periodic variation after the reference elements and setting means for setting the control means in dependence of a property of the record carrier indicated by said phase.

9. Device as claimed in claim 8, characterized in that the head is arranged for
10 scanning the track by a scanning beam via an entry side of the record carrier and the control means are arranged for performing tracking control in accordance with a tracking signal generated by the head, the track comprising a groove arranged in a surrounding surface, and wherein the setting means comprise controllable inverting means for whether or not inverting the tracking signal in dependence of the detected phase indicating that the bottom of the
15 groove is closer to the entry side than the surrounding surface.

10. Device as claimed in claim 8 or 9, characterized in that the device comprises recording means for recording data in the track.

20 11. Device as claimed in claim 8 or 9, characterized in that the setting means are arranged for setting a time window for detecting header information in dependence of the detected phase.

12. Method of manufacturing an optical record carrier comprising a track for
25 carrying data encoded in optical marks, the method comprising manufacturing a master record carrier and replicating the master record carrier via a number of replication steps, in which method a parameter of the track is provided with a periodic variation for generating a varying signal when scanning the track, and which track is provided with reference elements interrupting the periodic variation, characterized in that the phase of the periodic variation
30 after the reference elements is set to indicate a property of the record carrier that is determined by the method of manufacturing.